

BRUNSSTEYN, B.A.; KLIMENKO, V.L.

Processes used to prepare sodium alkyl sulfates, and their  
technical and economic evaluation. Khim.prom. no.4:253-257 Ap  
'61. (MIRA 14:4)

(Cleaning compounds) (Sulfuric acid)

S/191/62/000/008/011/013  
B124/B180

AUTHORS: Rudkovskiy, D. M., Ketslakh, M. M., Brunshteyn, B. A.,  
Klimenko, V. L.

TITLE: New polyatomic alcohols

PERIODICAL: Plasticheskiye massy, no. 8, 1962, 52-54

TEXT: On the example of production and application of trimethylol ethane and trimethylol propane in the USA, corresponding actual results and planned production in the USSR are discussed. Far-reaching possibilities of practical application in many branches of industry, and improved and more economic procedures are mentioned. In many cases, the use of trimethylol ethane and trimethylol propane instead of glycerin and pentaerythrone is of economic interest because of the reduced consumption of expensive raw materials. Basic investigations in this direction were made in the USSR by VNII Neftekhim in 1950. There are 2 tables. The three English-language references are: Ind. Eng. Chem. 50, No. 8 (1958); Chemistry in Canada, 12, No. 11, 38-42 (1961); Chem. Eng., No. 9, 41 (1961). 

Card 1/1

BRUNSHTEYN, B.A.; KLIMENKO, V.L.

Technical and economic evaluation of various methods of production  
of petroleum paraffins. Khim.i tekh.topl.i masel 8 no.8:33-37  
Ag '63. (MIRA 16:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh  
protsessov.

(Petroleum--Refining) (Paraffins)

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307110020-7

BRUNSHTEYN, B.A.; KLIMENKO, V.L.

Economics of the oxidation of paraffins. Khim.prom. no.9:662-665  
S '63. (MIRA 16:12)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307110020-7"

BRUNSHTEYN, B.A.; KLIMENKO, V.L.; RYABUKHOVA, S.F.

Improve the technical and economic indices of the production of  
synthetic fatty acids. Masl.-zhir.prom. 29 no.9:31-34 S '63.  
(MIRA 16:10)  
1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh  
protsessov.

BRUNSSTEYN, B.A.; GORENBURG, V.P.; KLIMENKO, V.L.; FUKS, Ye.Sh.;  
TSYRKIN, Ye.B.

Optimalizing the production of automobile gasoline in a petroleum  
refinery. Nefteper. i neftekhim. no.12:3-7 '63. (MIRA 17:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh  
protsessov.

BRUNSHTEYN, B.A.; IVANOV, A.G.; KIJMENKO, V.L.; TSYRKIN, Ye.B.

Distribution of expenditures for acetylene and ethylene in  
their simultaneous production. Nefteper. i neftekhim. no.4:28-  
30 '65. (MIRA 18:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh  
processov.

L 41808-65

ACCESSION NR: AP5012668

UR/0105/64/000/012/0006/0012

12

AUTHOR: Isayev, I. P. (Doctor of technical sciences, Professor); Brunshteyn, R.  
D. P. (Engineer)

TITLE: Method of analyzing the instabilities of semiconductor power diode  
characteristics

SOURCE: Elektrichestvo, no. 12, 1964, 6-12

TOPIC TAGS: semiconductor diode, semiconductor rectifier, electric transmission  
equipment, electric property, electric power engineering, electric power production

ABSTRACT: Volt-ampere characteristics of individual semiconductor rectifiers differ markedly, and reverse currents can differ by a factor of several thousand. Mean characteristics are therefore unreliable and desired operation is usually achieved through circuit redundancy. An analysis method is developed and applied to bridge-connected silicon diodes of a power rectifier rated at 200 amp and 300 to 800 volts. Results show that the scatter of volt-ampere characteristics of diodes can be found with any desired degree of exactness and the factor principally responsible for the deviation can be identified. The mean magnitude and dispersion of the voltage drop and reverse current are most suitably calculated statistically as a sum of random and nonrandom components.

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L 41803-65

ACCESSION NR: AP5012668

Voltage drops follow a Gaussian distribution, whereas the reverse current follows the law of real positive numbers. The laws of composition of random variables is suitable for clarifying the reasons for the deviation of the characteristics from the indicated distributions. Results of the studies confirm that the probable characteristics of various semiconductor devices can be calculated in advance. Pertinent mathematical relations are derived.

Orig. art. has: 20 formulas and 6 graphs.

ASSOCIATION: Moskovskiy institut inzhenerov zheleznodorozhnogo transporta  
(Moscow Institut of Railroad Transport Engineers)

SUBMITTED: OO

ENCL: OO

SUB CODE: EE, EC

NO REF SOV: 004

OTHER: OOO

JPRS

cc  
Card 2/2.

ISAYEV, I.P., prof., doktor tekhn. nauk; SAKOVICH, A.A., kand. tekhn. nauk;  
BRUNSHTEYN, D.P., inzh.; IN'KOV, Yu.M., inzh.; POLYAKOVA, T.S., inzh.

Distribution of reverse voltage in series-connected rectifiers.  
(MIRA 19:1)  
Trudy MIIT no.207:15-29 '65.

BRUNSHTEYN, D.P., inzh.

Nonuniformity of load distribution of semiconductor power  
rectifier circuits. Trudy MIIT no.207:30-39 '65.  
(MIRA 19:1)

BRUNSHTEYN, D.P., inzh.

Stability of the characteristics of semiconductor power rectifiers  
under operational conditions. Elektrotehnika 36 no.5:58-60 My '65.  
(MIRA 18:5)

SAKOVICH, A.A., kand. tekhn. nauk; BRUNSHTEYN, D.P., inzh.; IN'KOV, Yu.M., inzh.

Effect of the plate current drop rate on the recovery of the  
peak inverse anode voltage of semiconductor devices. Elektrotehnika.  
36 no.9:37-41 S '65. (MIRA 18:9)

BRUNSHTEYN, I. P.

Sanitary and hygienic working conditions in a Tashkent textile machinery plant and ways for their improvement. Med. zhur. Uzb. no.6:6-10 Je '62. (MIRA 15:7)

1. Iz Tashkentskoy sanitarno-epidemiologicheskoy stantsii Frunzenskogo rayona.

(TASHKENT--MACHINERY INDUSTRY--HYGIENIC ASPECTS)

NUSINOV, G.O., doktor tekhn. nauk; BRUNSHTEYN, N.Z., kand. tekhn. nauk;  
KULAKOVA, M.A.; DOTSENKO, P.N.

Underground gasification in flooded areas of a coal seam.  
Nauch. trudy VNII Podzemgaza no. 9:3-7 '63. (MIRA 16:11)

1. Laboratoriya gazifikatsii burykh ugley Vsesoyuznogo  
nauchno-issledovatel'skogo instituta podzemnoy gazifikatsii  
ugley.

BRUNSHTEYN, R.Ye.; KOBRINSKIY, A.Ye.

Dynamics of a nonlinear element with backlash. Trudy Inst.  
mash.Sem.po teor.mash. 19 no.75:31-48 (MIRA 13:1)  
(Automatic control) (Mechanical movements)

SOV/179-59-1-2/36

AUTHORS: Brunshteyn, R. Ye. and Kobrinskiy, A. Ye. (Moscow)

TITLE: Periodic Motions of a System Containing a Ball in a Cavity  
(Periodicheskiye dvizheniya sistemy, soderzhashchey sharik  
v polosti)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh  
nauk, Mekhanika i mashinostroyeniye, 1959, Nr 1, pp 10-21  
(USSR)

ABSTRACT: Motion of a model (Fig.1) composed of two masses  $M$  and  $m$  in contact is considered. The mass  $m$  (a ball) is placed in a cavity of the mass  $M$ , leaving an unoccupied space  $2r$  wide. Both masses are subjected to a motion under the action of a harmonic force  $P_0 \cos \omega t$ . The character of motion of the mass  $m$  produces an impact interaction with the mass  $M$ . The Eq.(1.1) describes a state of this system at rest. In general, the constants  $\varphi, c_1, c_2, c_3, c_4$  will take the new values after every impact. This can be calculated (Eqs.1.2 and 1.3) when two impacts are produced during a number of periods  $2n + 1$  ( $n = 0, 1, 2, \dots$ ) (Fig.2). Both intervals of motion

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SOV/179-59-1-2/36

Periodic Motions of a System Containing a Ball in a Cavity can be found from Eqs.(1.4), where  $\mu = M/m$ ,  $0 < R \leq 1$  - coefficient of impact regeneration. The Eqs.(1.3) can be expressed in non-dimensional forms (Eq.1.5), and the phase of impact  $\varphi_n$  as:

$$\sin \varphi_n = -\frac{1+\mu}{\mu} \frac{1-R}{1+R} \lambda_n, \cos \varphi_n = \sigma - \frac{\pi}{2}(2n+1) \frac{1+\mu}{\mu} \lambda_n,$$

where  $\lambda_n$  is found from Eqs.(1.6) and (1.7). As an example, the values of  $\lambda_n = \lambda_n(\sigma)$  for  $n = 0$  (2 impacts per period) are shown in Fig.3. Before the problem of physical construction of the system is considered, Eq.(1.2) should be examined together with the relations (1.8) and (1.9) (Fig.4). To determine the stability in all possible kinds of motion, detailed analysis should be performed, based on the equations of motion (2.1) and (2.2), where the argument  $\alpha$  is not zero. The characteristic values of disturbances of motion can be found from the "adjusted" Eqs.(2.1) and (2.2) and Eq.(1.4), so that Eqs.(2.3-2.5) are derived from which the values of  $\varepsilon_{11}$  are found for the first impact (Eq.2.6). The  $\nu$  impact

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SOV/179-59-1-2/36

## Periodic Motions of a System Containing a Ball in a Cavity

can be described by the Eqs.(2.7-2.15). Fig.5 shows the result of this analysis in the form of a "chart" which determines an effect of  $R$  and  $\sigma$  on stability. The experimental data on stability of motion were obtained from a device shown in Fig.6 (2 stable resistances 2 are placed on the table 1 of a vibro-stand. A steel ball 3 hangs freely from a steel needle 4). Displacements of the table under the action of impacts of the ball were recorded. The oscillograms obtained for  $\sigma_1 = 4$  and  $\sigma_2 = 5$  are shown in Fig.7, a and b respectively. It can be seen that they are related to the points 1 and 2 on the chart of stability (Fig.5) for  $R = 0.55$ . When the space was increased to  $\sigma_3 = 6$  (Fig.7 V) the motion ceased to have a periodic character which can be shown as point 3 on the chart. When  $\sigma_4 = 2$  (Fig.7g), the motion does not belong to the type considered in the analysis (point 4 in Fig.5). The case when  $R = 0$ , i.e. non-elastic impact, can occur when the velocity of mass  $M$  is equal to Eqs.(3.1)

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SOV/79-59-1-2/36

Periodic Motions of a System. Containing a Ball in a Cavity  
and (3.2). Then, for different values of  $\sigma$  (Eqs.3.3, 3.4)  
the relationship of masses  $m$  and  $M$  changes its character.  
It still possesses a periodical character when  
 $\sigma \geq 1/2\pi(2n + 1)$  and the Eqs.(3.6) to (3.8) are satisfied  
( $\alpha^*$  - interval of motion of both masses). A dynamic stability  
in this case ( $R = 0$ ) can be characterised as follows: when

$$n\pi < \sigma < \frac{1}{2}\pi(2n + 1)$$

the motion is stable when disturbances are small, or when:

$$\frac{1}{2}\pi(2n + 1) \leq \sigma \leq \sqrt{1 + \frac{1}{4}\pi^2(2n + 1)^2} \quad (n = 0, 1, 2\dots)$$

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SOV/79-59-1-2/36  
Periodic Motions of a System Containing a Ball in a Cavity

the motion is not stable. There are 7 figures and 11 references; 7 of the references are Soviet, 3 German and 1 English.

SUBMITTED: October 9, 1958.

Card 5/5

BRUNSHTEYN, R.Ye. (Moskva); KOBRINSKIY, A.Ye. (Moskva)

Stability of periodic movements of vibro-impact systems. Izv.AH  
SSSR. Otd.tekh.nauk.Mekh.i mashinostr. no.5:131-140 S-0 '60.  
(MIRA 13:9)  
(Vibration)

BRUNSHTEYN, R.YE.

PHASE I BOOK EXPLOITATION

SOV/5734

Akademiya nauk SSSR. Institut mashinovedeniya. Seminar po teorii mashin i mekhanizmov.

Trudy, t. 21, vyp. 83-84 (Academy of Sciences of the USSR. Institute of Machine Science. Seminar on the Theory of Machines and Mechanisms. Transactions) v.21, nos. 83-84. Moscow, Izd-vo AN USSR, 1961. 161 p. Errata slip inserted. 2000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR.

Editorial Board: Resp. Ed.: I.I. Artobolevskiy, Academician, G.G. Baranov, Professor, Doctor of Technical Sciences; M.L. Bykhovskiy, Doctor of Technical Sciences; V.A. Gavrilenco, Professor, Doctor of Technical Sciences; V.A. Zinov'yev, Professor, Doctor of Technical Sciences; A.Ye. Kobrinskiy, Doctor of Technical Sciences; N.I. Levitskiy, Professor, Doctor of Technical Sciences; N.P. Rayevskiy, Doctor of Technical Sciences; L.N. Reshetov, Professor, Doctor of Technical Sciences; and M.A. Skuridin,

Card 1/64

Seminar on the Theory (Cont.)

SOV/5734

Professor, Doctor of Technical Sciences; Ed. of Publishing  
House: A.A. Demidenko; Tech. Ed.: S.G. Tikhomirova.

PURPOSE: This collection of articles is intended for scientific research workers and designers in the fields of machine and mechanism dynamics.

COVERAGE: The articles in No. 83 discuss the following: developments and achievements in the field of machine and experimental dynamics, including vibrations and vibratory impact; investigations in the theory of intermittent motions; differential equations for describing the joint motion of mechanical (disbalancing) vibrators; investigations into the dynamics and stability of periodic regimes of motion in vibratory-impact systems; an attempt to find an approximate periodic solution of a second-order nonlinear differential equation; and results of the application of electronic analog computers in analyzing the operation of rolling mills. No. 84 includes articles on the following: an analytical

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Seminar on the Theory (Cont.)

SOV/5734

method for determining the positions of three-dimensional multiple-link mechanisms composed of three-dimensional kinematic groups with lower kinematic pairs; an analytical method for determining the parameters of the simplest hinged linkage with two degrees of freedom; a general method for investigating three-dimensional gearings; the effect of dry-friction dampers on vibrations in railway vehicles; and the utilization of Burmester's curves for determining the parameters of a multiple-link hinged linkage with a dwell. No personalities are mentioned. References accompany individual articles. There are 260 references: 212 Soviet, 31 English, 16 German, and 1 French.

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No. 83

Foreword	3
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Seminar on the Theory (Cont.)

SOV/5734

Artyobolevskiy, I.I. Fundamental Problems in Modern  
Machine Dynamics

[Reported February 2, 1960]

5

Artyobolevskiy, S.I. On Certain Fundamental Relationships of the Mechanics of Intermittent Motions and Their Utilization in Machine Design

[Reported January 29, 1960]

29

Blekhman, I.I. The Joint Operation of Several Synchronous Mechanical Vibrators

[Reported February 1, 1960]

41

Brunshteyn, R.Ye., and A.Ye. Kobrinskiy. Investigation of the Dynamics and Stability of Vibratory-Impact Systems

[Reported February 1, 1960]

46

Card 4/6

BRUNSHTEYN, R.Ye.; KOBRINSKY, A.Ye. (Moscow)

"Dynamics and stability of two-body systems moving with intermittent collisions"

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 January - 5 February 1964

BRUNSHTEYN, R. Ye. (Moskva); KOBRINSKIY, A. Ye. (Moskva)

Dynamics and stability of two-mass vibratory-percussion systems.  
Izv. AN SSSR Mekh. i mashinostr. no.5:71-76 S-0 '64  
(MIRA 18:1)

BABITSKIY, V.I.; BRUNSHTEYN, R.Ye.; KOBRINSKIY, A.Ye.

Dynamics and stability of elastic systems with backlash. Teor.  
mash.i mekh. no.105/106:122-134 '65.

(MIRA 18:4)

BRUNSHTEYN, V.A.

Phasing of a high-voltage automatic block system line. Avtom.,  
telem. i sviaz' 4 no.8:32 Ag '60. (MIRA 13:8)

1. Zamestitel' nachal'nika Ryazanskoy distantsii signalizatsii  
i svyazi Moskovskoy dorogi.  
(Railroads--Signaling--Block system)

BRUNSSTEYN, V.A.; NETYKS, Ye.P.

Testing of selenium rectifier columns of DIA cells. Avtom., telem.  
i sviaz' 7 no.8:30-31 Ag '63. (MIRA 16:9)

1. Glavnyy inzh. Ryazanskoy distantsii signalizatsii i svyazi  
Moskovskoy dorogi (for Brunshteyn). 2. Starshiy elektromekhanik  
kontrol'no-ispytatel'nogo punkta Ryazanskoy distantsii signalizatsii  
i svyazi Moskovskoy dorogi (for Netyks).  
(Railroads—Electronic equipment) (Electric current rectifiers)

BRUNSHTEYNS, Boris Anatol'yevich; KLIMENKO, Vladimir Leonidovich;  
TSYRKIN, Yefim Borisovich; RUDKOVSKIY, D.M., nauchn.red.;  
SEGAL', Z.G., ved.red.; DEM'YANENKO, V.I., tekhn.red.

[Production of alcohols from petroleum and gas] Proizvod-  
stvo spirtov iz neftianogo i gazovogo syr'ia. Leningrad,  
Izd-vo "Nedra," 1964. 199 p. (MIRA 17:3)

BRUNSMID, I.

Oil burners in heating technique. p. 1369.  
(Tehnika, Vol. 11, no. 9, 1956. Beograd, Yugoslavia)

SO: Monthly List of East European Accessions, (EEAL) LC, Vol. 6, No. 7,  
July 1957. Uncl.

BRUNST, V. V.

"The present state of the problem of action of X-rays on regeneration in vertebrates."  
(p. 469) by Brunst, V. V.

SO: Advanced in Contemporary Biology (Uspekhi Sovremennoi Biologii) Vol. VI, No. 3 1937

L 29749-66

ACC NR: AP6020880

SOURCE CODE: RU/0005/65/000/002/0055/0056

AUTHOR: Brunstein, Vladimir (Engineer)

21  
B

ORG: none

TITLE: Line equalization for unidirectional transmission

SOURCE: Telecommunicatii, no. 2, 1965, 55-56

TOPIC TAGS: telephone equipment, transmission line

ABSTRACT:

A study of the linear distortion correction required for the transmission of music over urban telephone cables, including an analysis of a fourpole with constant input when the load is a homogeneous urban telephone line. The practical results obtained in two cases in the Bucharest network are presented. Orig. art. has: 8 figures.  
[Based on author's Eng. abstract] [JPRS]

SUB CODE: 17, 09 / SUBM DATE: none

Card 1/1 CC

BRUNSTEIN, Vladimir, ing.

Line equalization for unidirectional transmissions. Telecommunicatii  
9 no.2:55-56 F '65.

DRUN52, 1.

Some new nuclear reactions produced in tin by fast neutrons. Z. Witkowski, K. Brunsz, and C. Dabrowski (Univ. Warszawa, Poland). *Bil. Akad. polon., sci. I*, 105-8(1953). — The existence of the reactions,  $\text{Sn}^{113}(n,p)\text{In}^{110}$  and  $\text{Sn}^{114}(n,p)\text{In}^{111}$  is proved. Spectrally pure Sn was bombarded with fast neutrons produced by the Li ( $d,n$ ) reaction. Nuclides with half lives of  $4.5 \pm 0.5$  min. and  $12.5 \pm 2$  sec., corresponding to  $\text{In}^{110}$  and  $\text{In}^{111}$  resp., were detected. Cross sections for the  $\text{Sn}^{113}(n,p)$  and  $\text{Sn}^{114}(n,p)$  reactions were detd. to be 0.00073 and 0.00091 barn, resp. — Shepherd Stigman

4-18-55  
B&W

L: 10097-66

EWT(1)/T/EWP(t)/EWP(b)

IJP(c)

JD/JW/GG

ACC NR: AP6001826

SOURCE CODE: P0/0053/65/000/012/0598/0601

AUTHOR: Brunsz, R.; Jun, J.; Piekarczyk, W.

ORG: Institute of Physics, PAN, Warsaw (Instytut Fizyki PAN, Warszawa)

TITLE: Preparation of single crystal of calcium flouride

SOURCE: Przeglad elektroniki, no. 12, 1965, 598-601

TOPIC TAGS: calcium fluoride, single crystal

ABSTRACT: Experiments with and apparatus for preparation of single crystals of fluorite ( $\text{CaF}_2$ ) in an induction-heated graphite crucible in nitrogen atmosphere are described. Zone purification was used. Immediately after the crystallization, a crystal relaxation took place. Details of the crystallization furnace are shown in the accompanying figures. Automatic temperature stabilization was achieved by using a photoelectric pyrometer. Good quality, practically stress-free crystals were obtained. Orig. art. has: 3 figures.

SUB CODE: 11, 20 / SUBM DATE: none / ORIG REF: 000

Card 1/2

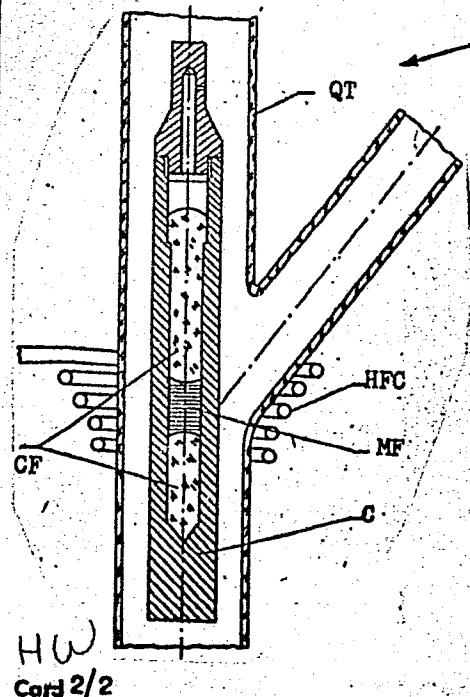
UDC: 546.41:621.389

37

B

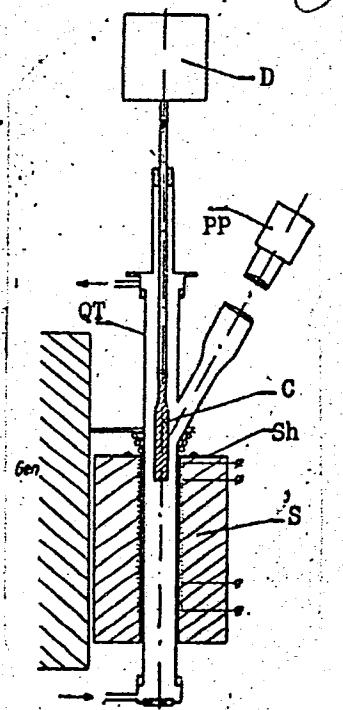
L 10097-66

ACC NRAP6001826



Crucible cross-section showing zone-purification process. C - crucible; QT - quartz tube; HFC - h-f coil; CF - crystalline fluorite; MF - molten fluorite.

Construction of crystallizer.  
C - crucible;  
S - stress relaxation stove;  
QT - quartz tube;  
Gen - h-f generator;  
Sh - shield;  
PP - photoelectric pyrometer;  
D - driving mechanism.



KATSOBASHVILI, Ya.R.; BRUN-TSEKHOVOY, A.R.; SHCHEKIN, V.V.; SLADKOVSKAYA, I.R.

Microspherical nickel-alumina catalysts for the conversion of  
natural gas flown through. Kin.i kat. 2 no.4:567-573 Jl-Ag '61.  
(MIRA 14:10)

1. Institut neftekhimicheskogo sinteza AN SSSR.  
(Gas, Natural) (Catalysis)

BOCHKOV, V.I.; BRIGADIRENKO, V.G.; BRUN-TSEKHOVOY, A.R.; GOLOSOV, S.A.;  
ISTOMIN, A.P.; KATSOBASHVILI, Ya.R.; LASKOVENKO, E.K.; MIGUR, V.V.

Auger flowmeter for loose materials. Mash. i neft. obor.  
no.7:33-35 '65. (MIRA 18:12)

1. Kombinat No.16, g. Angarsk.

BRUNZEL', Yu.M., inzh.; REGIRER, Z.L., inzh.; SVET, B.I., inzh.;  
PUCHKOV, V.A., inzh.

Automatic control of carbon potential in gas carburizing.  
Metalloved. i term. obr. met. no.11:41-45 N '62. (MIRA 15:11)  
(Case hardening—Equipment and supplies)

BRUOTH, V.; OTTIS, V.

Spreading of rectal cancer through the lymphatic system and its importance. Bratislav. lek. listy 34 no.2:138-147 F '54.

1. Z Chir. odd. Onk. ust. v Bratislave, prednosta doc. dr. V.Bruoth,  
a z Pat. anat. ustavu LFSU v Bratislave, prednosta prof. dr J.Klein.  
(RECTUM, neoplasms,  
\*metastases through lymphatic system, surg.)

BRUS, A.Ye.

BELYAKOV, F.Ye.; BABIN, B.N.; BAL', V.; BOROVKOV, P.N.; VOYEVODIN, I.N.;  
GUREVICH, G.M.; GORBUNOVA, P.I.; KONNOV, A.S.; KALANTAROVA, M.V.;  
KASHIRSKIY, A.Ya.; KAZANCHEYEV, Ye.N.; LEKSUTKIN, A.F.; LETI-  
CHEVSKIY, M.A.; LOPATIN, S.Z.; MIRSKIY, V.N.; PODSEVALOV, V.N.;  
SUBBOTINA, V.P.; TANASIYCHUK, N.P.; FEDOTOV, S.D.; FISENKO, K.N.;  
EL'KIND, I.G.; BOVIN, S.S.; VASIL'YEV, L.T.; DRINKOV, V.D.; DALE-  
CHIN, N.I.; DADAGOV, I.A.; YERMOSHINA, V.I.; ZHUKOV, I.V.; ZIMIN,  
D.A.; IVANNIKOV, A.Ya.; KOVALEV, M.K.; LUGAKOVSKIY, N.L.; NALEVSKIY,  
A.F.; SEREZHNIKOV, V.K.; SEMIGLASOV, M.D.; SOKOLOV, A.V.; STEPANOV,  
V.I.; SAKHARIN, G.S.; SAVENKO, P.A.; SOLODOV, V.P.; UMEROV, Sh.Kh.;  
CHIKINDAS, G.S.; SHCHERBUKHINA, S.N.; DYNKIN, G.Z.; LYSOV, V.S.;  
OSHEROVICH, A.N.; ROKITSINSKIY, E.V.; BRASLAVSKIY, M.S.; RUDENKO,  
I.A.; ZHUKOBORSKIY, M.S.; ZHDANOV, I.Ye.; SUSLIN, V.A.; BRUS, A.Ye.;  
VOLYNSKIY, S.A.; KLYUYEV, V.A.; ISTRATOV, A.G.; TIKHOMIROV, I.F.;  
BUTYRIN, Ya.N.; VOLYNSKIY, S.A.; MINYEYEV, M.F.; MAL'TSEV, V.I.;  
VIDETSKIY, A.F., kand.tekh.nauk, glavnnyy red.; DEMIDOV, A.N., red.;  
KRAVETS, A.L., red.; KLIMOVA, Z.I., tekhn.red.

[Industrial Astrakhan] Promyshlennaya Astrakhan'. Astrakhan',  
Izd-vo gazety "Volga," 1959. 318 p. (MIRA 12:11)

1. Astrakhan (Province) Ekonomicheskiy administrativnyy rayon.  
(Astrakhan Province--Economic conditions)

Y/001/63/000/002/003/006  
D294/D308

AUTHOR: Brus, Branislav, Engineer

TITLE: The approximate calculation of the aerodynamic characteristics of trapezoidal wings with slotted flaps

PERIODICAL: Tehnika, no. 2, 1963, 213-219

TEXT: Factors influencing the lift coefficient of wings with flaps are described: boundary layer, effective curvature and lifting surface. Expressions  $C_z = f(\psi)$ ,  $C_m = f(\alpha)$  and  $C_x = f(C_z)$  ( $C_z$  being the lift coefficient,  $C_m$  the pitching moment coefficient,  $C_x$  the drag coefficient and  $\alpha$  the angle of incidence; deflection of flaps and geometric dimensions being parameters) are derived for trapezoidal wings of the shape coefficient (slimness)  $\lambda \geq 4$  with single-slot flaps and at the angle of incidence of  $6 - 10^\circ$ . Increments of these functions are analyzed and it is shown that the taper ratio of wings does not influence the gradient of lift coefficient. Results obtained by calculation and by measurements on the model in a wind tunnel are tabulated for comparison. There are 6 figures and

Card 1/2

Y/001/63/000/002/003/006  
D294/D308

The approximate calculation ...

1 table.

ASSOCIATION: Vazduhoplovnotehnički institut, Beograd - Žarkovo  
(Institute of Aeronautics, Belgrade, Žarkovo)

Card 2/2

BRUS, Irena.

Marchiafava-Micheli nocturnal paroxysmal hemoglobinuria according to recent pathogenic concepts. Polski tygod. lek. 10 no.44:1431-1435 31 Oct 55.

1. w Kliniki Hematologicznej; kierownik: prof. dr. med. W.Lawkowics.  
Instytutu Hematologii w Warszawie; dyrektor: doc. dr. med. A.Tro-  
janowski. Warszawa, ul. Chocimaka 5. Instytut Hematologii.  
(HEMOGLOBINURIA, PAROXYSMAL, case reports)

EXCERPTA MEDICA Sec. 6 Vol. 11/11 Nov. 57

*BRUS I 78/11*

6952. BRUS L Klin. Hematol. i Inst. Hematol., Warszawa. "Z zagadnień hemolizy w chorobie Addisona-Biermera. Haemolysis in Addison-Biermer disease POL. ARCH. MED. WEWNĘT. 1956, 26/11 (1739-1741)  
A study was made of the signs of haemolysis in 70 cases of pernicious anaemia. In one group of patients, not only the classical tests were done but also determination of cholesterolæmia, of the resistance of the erythrocytes to saponins, and of the complement activity of the bone marrow as compared with that of the peripheral blood. The survival time of the erythrocytes was measured by a method of differential agglutination. It is concluded that the cause of the haemolysis should not be sought in the erythrocytes but in their milieu.

BRUS, Irena; LEWIS, Mitchell

Behavior of the serum haptoglobin level in hemolytic anemia.  
Polski tygod. lek. 16 no.16:581-584 16 Ap '61.

1. Z Postgraduate Medical School, Department of Hematology, London;  
kierownik: prof. J. Dacie i z Oddzialu Hematologicznego; kierownik:  
dr med. S. Pawelski, Instytutu Hematologii w Warszawie; dyrektor:  
doc. dr med. A. Trojanowski.

(ANEMIA HEMOLYTIC blood) (BLOOD PROTEINS)

BRUS, Irena

Value of the determination of radioactivity of urine after intramuscular administration of vitamin B12 in its deficiency. Polskie arch. med. wewn. 31 no.5:629-632 '61.

1. Z Oddzialu Hematologicznego Kierownik: dr med. S. Pawelski Instytutu Hematologii Dyrektor: doc. dr med. A. Trojanowski.

(VITAMIN B12 metab)

BRUS, Irena; KRZYZANOWSKA-WOZNIAKOWSKA, J.

Observations on the use of testosterone in aplastic anemia in adult subjects. Pol. tyg. lek. 18 no.25:913-915 17 Je '63.

l. Z Oddzialu Hematologicznego; kierownik: prof. dr med. W. Lawkowicz i z Oddzialu Chorob Wewnetrznych; kierownik: doc. dr med. S. Pawelski, Instytutu Hematologii; dyrektor doc. dr med. A. Trojanowski.

(ANEMIA, APLASTIC) (TESTOSTERONE)  
(PREDNISONE)

BRUS, Irena; CZARNOBIELSKA, Wiktoria; KOLAKOWSKA, Krystyna; MDZIENSKI,  
Bohdan; TRACZYK, Zdzislawa

Di. Guglielmo's syndrome in the light of observed cases. Pol.  
Arch. med. wewnet. 34 no. 6:767-772 '64

I. Z Kliniki Hematologicznej Instytutu Hematologii w War-  
szawie (Kierownika prof. dr. med. W. Laskowicz).

BRUS, Irena; LITWIN, Joanna; MDZEWSKI, Bohdan; TRACZYK, Zdzislawa

Observation on the effect of some infections on the course of acute leukemia in adults. Pol. arch. med. wewnet. 34 no.12: 1681-1687 '64.

1. Z Kliniki Hematologicznej Instytutu Hematologii i Katedry Hematologii Studium Doskonalenia Lekarzy (Kierownik: prof. dr. med. W. Laskowicz).

TOPOLSKA, Paula; BRUS, Irena

Determination of formiminoglutamic acid (FIGLU) in the urine  
as a method for the diagnosis of deficiency of folic acid and  
its derivates. Pol. tyg. lek. 20 no.34:1270-1272 23 Ag '65.

1. Z Kliniki Chorob Wewnętrznych (Kierownik: doc. dr. S. Pawelski)  
i z Kliniki Hematologicznej (Kierownik: prof. dr. W. Lawkowicz)  
Instytutu Hematologii w Warszawie.

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307110020-7

BRUS, Ivan

Construction of the electric power line of 220 kV between Split and Zagreb. Energija Hrv 10 no. 1/2:41-42. '61

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307110020-7"

BRUS, Ivan (Zagreb)

Difficulties and positive results in the construction of the  
220 kv. transmission line Split-Zagreb. Energija Hrv 11  
no.3/4:87-91 '62.

1. "Dalekovod" (Zagreb, Proleterskih brigada 37).

BRUS, J.

A report on the works of the Hydrometeorological Direction of Ljubljana in measuring  
the silt and muddiness of water. p. 93.  
(GLASNIK, Vol. 6 (i.e. 5) No. 3/4 July/ Dec. 1956 (Published 1957)

SO: Monthly List of East European Accessions (EEAL) LC Vol. 6, No. 12, Dec. 1957  
Uncl.

CHRUSCIEL, Tadeusz L.; POJDA, Stefan M.; BRUS, Ryszard

Effect of superinone and cholecalciferol on oxygen consumption  
by liver tissue in the white rat. Acta physiol. Pol. 15  
no.1:93-99 Ja-F '64.

1. Z Zakladu Farmakologii Slaskiej Akademii Medycznej w Zabrze-  
Rokitnicy (Kierownik: doc. dr T. L. Chrusciel).

CHRUSCIEL, Tadeusz Leslaw; KLEINROK, Zdzislaw; HERMAN, Zbigniew; JANIEC,  
Waldemar; BRUE, Ryszard

The effect of certain chrenotropic compounds on the development  
of experimental atherosclerosis. Acta physiol. Pol. 15 no.2:  
257-268 Mr-Ap '64.

1. z Zakladu Farmakologii Sl. Akademii Medycznej w Szczecinie  
(Kierownik: doc. dr T. Chrusciel).

BRUSAK, R.; MACHOVIC, V.; RABL, B.

"Laboratory research on dressing of Czechoslovak polymetallic ores in heavy liquids." (Supplement) p. 1

RUDY. Praha, Czechoslovakia, Vol. 7, No. 5, May, 1959

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September, 1959  
Unclassified

USSR/Pharmacology. Toxicology. Chemotherapeutic Preparations  
A) Antibiotics

V

Abs Jour : Ref Zhur - Biol., No II, 1958, No 52101

Author : Brusakov M.I.

Inst : -

Title : A Case of Successful Antibiotic Therapy of Diabetes Insipidus

Orig Pub : Vracheb. delo, 1957, No 10, 1085-1086

Abstract : A female patient, 40 years old, suffered for 5 years from diabetes insipidus, not responding to any therapy. Besides the usual symptoms of diabetes insipidus, there was a noteworthy persistence of a low grade fever; there were also neurological changes, suggestive of active encephalitis in the area of the midbrain and pituitary. In the past history- a tuberculous gonitis; lung X-rays showed fibroid radioocular tuberculosis. Treatment with streptomycin and Pas showed rapid improvement, and after a number of slight flare-ups, the patient recovered. This confirmed the tuberculous nature of the disease. -- S.B. Moldavskiy.

Card : 1/1

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307110020-7

SMAGIN, G.A.; BRUSAKOV, M.I.

Pathogenesis and treatment of chronic gastritis. Klin. med. 38  
no. 4:18-22 Ap '60. (MIRA 14:1)  
(STOMACH--DISEASES)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307110020-7"

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CIA-RDP86-00513R000307110020-7

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APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307110020-7"

BAYMAKOV, Yu.V.; BRUSAKOV, Yu.I.

Reduction smelting of aluminosilicates. Trudy LPI no.188:24-39  
'57. (MIRA 11:9)  
(Aluminosilicates) (Reduction, Electrolytic)

DANTSIS, Ya.B., kand. tekhn. nauk; MITROFANOV, N.N., inzh.; SIROTKIN, N.N.,  
inzh.; BRUSAKOV, Yu.I., inzh.; VERIGIN, V.N., kand. tekhn. nauk

Electrical characteristics and principal indices of electric  
furnaces for manufacturing aluminum-silicon alloys. Prom.  
energ. 21 no. 1:39-44 Ja '66 (MIRA 19:1)

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307110020-7

YUSHKEVICH, L.B.; BRUSALEVSKAYA, L.M.

[Plates on human anatomy] Uchebnye tablitsy "anatomiya cheloveka."  
Moskva, 1955. 40 plates  
(ANATOMY, HUMAN-ATLASES)

(MLRA 9:7)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307110020-7"

IVANOV, Mikhail Fedorovich, akademik; ROMANOVICH, Ye.F., red.;  
GREBEN', L.K., akademik, otv. red.; SMETNEV, S.I.,  
akademik, otv. red.; OVSYANNIKOV, A.I., otv. red.;  
BRUSANOV, N.A., red.

[Complete collected works in seven volumes] Polnoe sob-  
ranie sochinenii v semi tomakh. Moskva, Klos. Vol.7.  
1965. 686 p. (MIRA 18:7)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk  
imeni V.I.Lenina (for Greben'. Smetnev). 2. Chlen-  
korrespondent Vsesoyuznoy akademii sel'skokhozyaystven-  
nykh nauk imeni V.I.Lenina (for Ovsyannikov).

AVRAMENKO, Fedor Dmitriyevich; BRUSANOVSKIY, Semen Genrikhovich;  
MAKAROVA, E.A., red.; DROZDOV, G.M., tekhn. red.

[Magnitogorsk and Kuznetsk; competition between the steelworkers  
of the Urals and Siberia] Magnitka-Kuznetsk; sorevnovanie metal-  
lurgov Urala i Sibiri. Moskva, Izd-vo VTSSPS Profizdat, 1962.  
97 p. (MIRA 15:5)

(Novokuznetsk—Steel industry)  
(Magnitogorsk—Steel industry)  
(Socialist competition)

BRUSCHIN I. M. Problemele fundamentale din cancerologie moderna Fundamental problems of modern cancerology Medicina Romana, Bucharest 1949, 4/11 (518-521)

Following the introduction of 'Mitchurinism' (theories of Mitchurin) into Soviet science, the author gives a critical review of results obtained during 30 years by scientists of USSR regarding the aetiology, pathology and treatment of cancer. He does not approve of the mutation theory of N.N. Petrov and brings forward a series of experimental Soviet findings, which show that neurohormonal disturbances preceded the appearance of the tumours, and the appearance, growth and evolution of cancer is the result of a pathological correlation between diverse disturbed functions of the organism and cancerogenous cells. The various forms of cancer are classed in three groups : (1) Cancer exclusively due to the factors of the surrounding environment (occupational cutaneous cancer, cancer of radiologists, etc.). (2) Cancers provoked by general disturbances of metabolism (cancer of the digestive tract). (3) Cancers due to endocrine disturbances (cancer of the breast, prostate).

So: Medical Microbiology and Hygiene, Section IV, Vol 3, No. 1-6

BRUSCHIN, J.

TECHNOLOGY

Periodicals: HIDROTEHNICA. Vol. 3, no. 7, July 1958

BRUSCHIN, J. Lowering ~~the~~ phreatic level by means of acicular filters;  
experimental works and the method applied in a pumping station on the  
Borcea island. p. 247

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 2,  
February 1959, Unclass.

"APPROVED FOR RELEASE: 06/09/2000

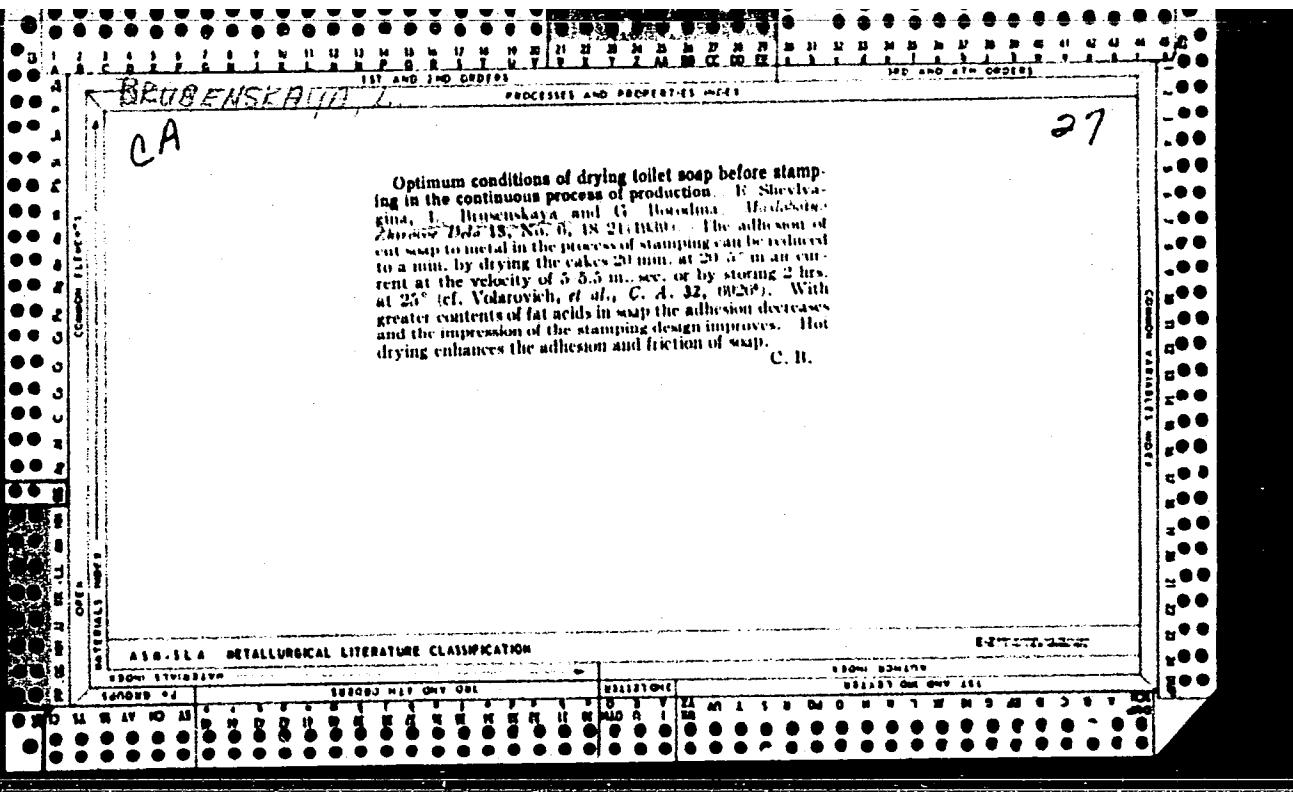
CIA-RDP86-00513R000307110020-7

MEL'NIKOV, N.N.; SOKOLOWA, Ye.M.; TRUNOV, P.P.; BRUSENINA, G.I.

Preparation of captan, a fungicide. Zhur.prikl.khim. 34 no.11:  
2550-2554 N '61. (MIRA 15:1)  
(Captan)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307110020-7"



Brusenskiy, A.

BRUSENSKIY, A.

Preparation for preventing incrustation formation in engine cooling  
systems. Avt.transp.33 no.8:20-21 Ag'55. (MLRA 8:12)  
(Automobiles--Engines--Cooling)

BRUSENSKIY, F.T.

Experience in the application of synthetic tanning materials in  
the manufacture of stiff leather. Kozh.-obuv. prom. 7 no.1:33-34  
Ja '65. (MIRA 18:3)

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307110020-7

BRUSENTOV, L.V., kand. tekhn. nauk

Testing of electrical machines and apparatus using a "standard"  
graph. Elektrotehnika 35 no.10:64 O '64.

(MRA 17:11)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307110020-7"

KLYACHKO, Yu., TARASENKO, M., BRUSENTSEV, A.

Fedor Mikhailovich Shemiakin; on his 50th birthday and the 25th  
anniversary of his pedagogical work. Zhur.anal.khim. 10 no.6:  
385-386 N-D '55. (MLBA 9:3)  
(Shemiakin, Fedor Mikhailovich, 1905-)

BRUSENTSEV, A.I., inzh.

Studying the traction indices of the T-130 tractor. Trakt. i  
sel'khozmash. no.11:10-12 N '64. (MIRA 18:1)

1. Chelyabinskij traktornyy zavod.

DVORYANKIN, V.F.; BRUSENTSEV, F.A.

Corrections to normal equations in the least squares method for more accurate definition of crystalline structures. Kristallografiia 7 no.6:954-956 N-D '62. (MIRA 16:4)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR.  
(Least squares) (Differential equations)

BRUSENTSEV, F.A.; DVORYANKIN, V.F.

Method of least squares in the structural analysis of crystals.  
Zhur.strukt.khim. 4 no.3:465-481 My-Je '63. (MIRA 16:6)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR.  
(Crystallography) (Lattice theory)

S/070/63/008/001/002/024  
E132/460

AUTHOR: Brusentsev, F.A.

TITLE: A program for refining crystal structures on a large electronic computer by the method of least squares

PERIODICAL: Kristallografiya, v.8, no.1, 1963, 10-15

TEXT: A program has been compiled for refining the atomic coordinates  $x_j, y_j, z_j$ , the isotropic thermal vibration parameters  $B_j$  of each atom and the normalization coefficient  $k$  in a crystal structure. The number of parameters refined simultaneously may reach 90 and those included but fixed may number up to 400. The number of non-zero experimental structure amplitudes can be up to 3000. Each  $|F_e(h,k,l)|$  is entered with its indices in a single cell of the machine. The indices can go up to (+50, +50, +50). The type of machine for which the program is designed is not stated. The program runs as follows: Input: (1) mod.  $F_e(h,k,l)$ ; (2) atomic scattering factors  $f_j(h,k,l)$  in a table in steps of 0.1 up to 1.6 - 14 sorts of atoms can be handled simultaneously; (3) structural parameters, positions, temperature factors and normalization coefficient; (4) table of dynamic corrections; (5) weighting function - the  $F$  values can be divided into 10 groups.  
Card 1/2

A program for refining ...

S/070/63/008/001/002/024  
E132/E460

according to magnitude; (6) numbers of atoms etc.  
Sub-routines: (1) setting up the basic routine;  
(2) allocation of F to groups by weight; (3) calculation of differences between calculated and experimental Fs by groups;  
(4) dynamic correction applied to Fs; (5) translation of Fs into binary; (6) translation of refined parameters into binary;  
(7) obtaining normal equations and sending of results to external memory; (8) calculating trigonometric part of structure factor and its derivatives in three directions for a definite space group put in on punched cards; (9) calculation of standard deviations; (10) calculation of  $F_t$  and derivatives. The program finishes when a given number of cycles of refinement has been completed or no correction exceeds a certain value or R reaches a predetermined value or corrections to the parameters do not exceed half the corresponding standard deviation.

ASSOCIATION: Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR (Institute of Inorganic Chemistry of the Siberian Section AS USSR)

SUBMITTED: June 29, 1962  
Card 2/2

L 12804-63 EWA(h)/EMT(1)/BDS AFFTC/ASD WW  
ACCESSION NR: AP3000766 S/0070/63/008/003/0338/0345 55

52

AUTHOR: Brusentsev, F. A.

TITLE: Analytical representation of x-ray atomic scattering coefficients in the form of a polynomial

SOURCE: Kristallografiya, v. 8, no. 3, 1963, 338-345

TOPIC TAGS: atomic scattering coefficients, x-ray, electron, H, Zn, Fm

ABSTRACT: By the method of least squares, and by means of an electronic computer, an approximation is made toward representation of x-ray atomic scattering coefficients in the form of a ninth-order polynomial. This formula is taken from the work of J. Gillis (Acta crystallogr., 11, 833, 1958). The tabular data are drawn from the tables of atomic scattering coefficients published in vol. 3 of the International Tables, prepared by Vaynshteyn and Ibers. In selecting the order of the approximating polynomial the atomic scattering coefficients of three atoms were used: H, Zn, and Fm. Results of the approximation are shown in Table 1. As seen in this table, the precision of approximation decreases with increasing atomic number. The ninth order is chosen because the precision of approximation increases imperceptibly at higher orders. The precision of the approximation has been computed according to Formula (1). The author considers computations made

Card 1/2

L 12804-63

ACCESSION NR: AP3000766

according to this formula to be completely reliable, and he calculates the scattering coefficients for all the elements in the periodic table. "In conclusion I express my thanks to B. K. Vaynshteyn and V. F. Dvoryankin for material they courteously submitted and for their interest in the work." Orig. art. has: 7 formulas and 2 tables.

ASSOCIATION: Institut neorganicheskoy khimii SO AN SSSR (Institute of Inorganic Chemistry, SO AN SSSR)

SUBMITTED: 10Sep62

DATE ACQ: 21Jun63

ENCL: 02

SUB CODE: PH

NO REF Sov: 000

OTHER: 008

Card 2/42

BRUSENTSEV, F.A.

Analytic representation of X-ray atomic scattering factors in  
the form of a polynomial. Kristallografiia 8 no.3:338-345 Je '63.  
(MIRA 16.11)

1. Institut neorganicheskoy khimii Sibirskego etdeleniya AN  
SSSR.

ACCESSION NR: AP4039391

S/0070/64/009/003/0323/0329

AUTHOR: Brusentsev, F. A.

TITLE: A program for finding atomic factors of scattering by centrosymmetrical crystal structure for zero experimental structural amplitude by the method of least squares

SOURCE: Kristallografiya, v. 9, no. 3, 1964, 323-329

TOPIC TAGS: computer programming, crystal structure, least square method, scattering factor

ABSTRACT: In this work the author has attempted to find atomic functions for the case when the investigator knows experimental structural amplitudes, the positions of atoms in the unit cell, but does not know the scattering factors that correspond to the actual positions of the atoms. The problem may be solved definitively by other methods, making use of crystallochemical considerations, but these considerations are sometimes controversial or questionable, and it would be useful to have some independent method of solving the problem. If the signs of N experimental (measured) amplitudes are known, it is possible to set up N equations for these N amplitudes, representing the summed values of the scattering factor. When the

Card 1/3

ACCESSION NR: AP4039391

scattering factor is represented as an exponential function, the method of least squares may be applied, but the task is simplified by using only values of zero-measured amplitude (for which the computed value is not equal to zero). A system of linear equations relative to the scattering factor is then set up. If the atomic numbers of component atoms are near each other, it may be desirable to add a supplementary corrective set of equations using the largest values of structural amplitude. The system of equations may then be solved by programming it on a large computer. The basic features of the program are similar to those previously described by the author (Zh. strukt. khimii, 5, 155, 1964). It was found that the refinement obtained by using the supplementary system of equations is slight, changing values obtained by the first system by very small amounts. It was concluded that in using the method of least squares the number of experimental measurements must be two to three times the number of determinative parameters. For 12 parameters, 24-30 measurements are considered necessary. Twenty-eight measurements gave an error less than 10%, but 16 measurements gave values differing from the true value by almost 50%. The first system of equations (for null values of structural amplitude) applies to noncentrosymmetrical as well as centrosymmetrical crystals, but the second system (for maximum values of amplitude) is valid only for centrosymmetrical structures. Orig. art. has: 1 table and 6 formulas.

Card 2/3

ACCESSION NR: APL039391

ASSOCIATION: Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR  
(Institute of Inorganic Chemistry, Siberian Department, AN SSSR)

SUBMITTED: 30Aug63

ENCL: 00

SUB CODE: SS, DP

NO REF Sov: 003

OTHER: 004

Card 3/3

ACCESSION NR: AR4034659

S/0196/64/000/003/B005/B005

SOURCE: Ref. zh. Elektrotekhn. i energ., Abs. 3B26

AUTHOR: Gutman, V. I.; Parshits, Ya. N.

TITLE: Effect of foreign ions on the electron processes in ionic crystals. Abstract

CITED SOURCE: Izv. Leningr. elektrotekhn. in-ta, vy#p. 51, 1963, 185

TOPIC TAGS: ionic crystal, electron process in crystal, foreign ion in crystal

TRANSLATION: A method is described for tinging alkali-halogene crystals from a Ta cathode. The effect of additive tinging upon the electronic characteristics of alkali-halogene crystals is due to the heavy-metal impurities whose ions form centers of electron capture. Introduction of Cu, Ni ions into a decolorized crystal restores the original color. It is found that the ratio of F-center mobility at the second tinging to the mobility at the first tinging ( $K$ ) is a definite characteristic of both natural and grown single crystals. On introduction of (Cu, Ni) ions, any crystal acquires the characteristics of a crystal with  $K \neq 1$ . On the other hand, the electronic tinging imparts the characteristics with  $K = 1$  to any crystal. Variation in the luminous intensity  $J$  of the light passing through

Card 1/2

ACCESSION NR: AP4039392

S/0070/64/009/003/0330/0334

AUTHORS: Brusentsev, F. A.; Borisov, S. V.

TITLE: Discrimination of crystal structure from a set of Patterson peaks by means of a computer

SOURCE: Kristallografiya, v. 9, no. 3, 1964, 330-334

TOPIC TAGS: computer programming, crystal structure, Patterson function, simpsonite

ABSTRACT: One of the principal tasks in deciphering the Patterson function is a solution of the problem concerning the distribution of N atoms for M possible sites ( $M^N$ ) by peaks of the Patterson function or by maxima when minimizing the function. The authors propose a program that offers a very simple approach to the solution of this problem, permitting a check on unnecessary peaks by means of comparing the divergence factors. This simplification, which greatly facilitates and accelerates programming, does not permit determination of some other structural properties, such as symmetry. The procedure involves: computation of the divergence factor R successively for M structural variants with n known atoms, choosing one of these with a minimal value of divergence. The coordinates of the peak corresponding to Card 1/2

ACCESSION NR: APL039392

this variant apply to the  $(n+1)$ st atom. Considering that the structure now consists of  $(n+1)$  atoms, one seeks the  $(n+2)$ nd atom. In this procedure, R may be computed either from all M peaks or only from the remaining  $(M-1)$  peaks. The procedure is continued till the positions of all  $(N-n)$  atoms of the given structure are defined. It is noted that (in setting up the program) a definite number of unknown kinds of atoms and a definite number of unknown atoms of each kind are assumed. The kind of atom is determined by its atomic number. The divergence factor may be written for only selected atoms, for only those atoms having a value of R that differs by no more than some predetermined value needed for the solution, or for all atoms. The latter two are useful when the R factors for different peaks are nearly the same and when the computer, because of experimental errors, may select the wrong peaks. A program was set up to test this procedure for the structure of simpsonite and gave good results. Orig. art. has: 1 table and 2 formulas.

ASSOCIATION: Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR  
(Institute of Inorganic Chemistry, Siberian Department, AN SSSR)

SUBMITTED: 21Jun63

ENCL: 00

SUB CODE: SS, DP  
Card 2/2

NO REF SOV: 008

OTHER: 005

BRUSENTSEV, F.A.

Program for a more exact definition of crystalline structures  
by the method of least squares using a large electronic com-  
puter. Kristallografiia 8 no.1810-15 Ja-F'63 (MIRA 1787)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR.

KUKINA, G.A.; BOKIY, G.B.; BRUSENTSEV, F.A.

X-ray diffraction study of platinum cis-ethylene ammine dibromide.  
Zhur. strukr. khim. 5 no.5:730-736 S-0 '64 (MIRA 18:1)

1. Institut obshchey i neorganicheskoy khimii imeni N.S. Kurnakova  
AN SSSR i Institut neorganicheskoy khimii Sibirskogo otdeleniya  
AN SSSR.

BURDINA, V.I.; BRUSENTSEV, F.A.; SALTYKOV, A.I.; KOZHUKHINA, S.K.; GRYAZEVA,  
R.P.

Complex of programs for solving the planar problems of crystal  
structure analysis. Zhur. strukt. khim. 5 no.6:936-937 M-D '64.  
(MIRA 18:4)

l. Vychislitel'nyy tsentr Sibirskogo otdeleniya AN SSSR, Novo-  
sibirsk.

BRUSENTSEV, F.A.; DVORYANKIN, V.F.

Analytical representation of the atomic factors of scattering  
for electrons. Kristallografiia 8 no.2:260-263 Mr-Ap '63.

(MIRA 17:8)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR.

BRUSENTSEV, F.A.

Program for determining the atomic scattering factors of a centrally symmetrical crystalline structure from the zero-point experimental structural amplitudes using the method of least squares. Kristallografiia 9 no.3:323-329 My-Je '64.  
(MIRA 17:6)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya  
AN SSSR.

BRUSENTSEV, F.A.; BORISOV, S.V.

Determining the crystalline structure from a set of Patterson's peaks by means of a computer. Kristallografiia 9 no.3:330-334 My-Je '64. (MIRA 17:6)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR.

DVORYANKIN, V.F.; DRUSENTSEV, F.A.

Modification of the method of least squares in the structural analysis of crystals. Kristallografiia 9 no.4:548-550 Jl-Ag '64.  
(MIRA 17:11)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR.

BORISOV, S.V.; BRUSENTSEV, F.A.

More accurate definition of the structure of "uklonskovite".  
Zhur.strukt.khim. 6 no.5:788-790 S.O '65.

(MIRA 18:12)

I. Institut neorganicheskoy khimii Sibirskogo otdeleniya  
AN SSSR, g. Novosibirsk. Submitted April 24, 1965.

BRUSENTSEV, F.A.; BORISOV, S.V.; KLENTSOVA, R.F.

Defining more accurately the crystalline structure of creeditite  
 $\text{Ca}_3\text{Al}_2(\text{F},\text{OH})_{10}\text{SO}_4 \cdot 2\text{H}_2\text{O}$ . Zhur. strukt. khim. 6 no. 4:567-570  
Jl-Ag '65 (MIRA 19:1)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR,  
g. Novosibirsk. Submitted June 22, 1964.

BRUSENTSEV, N.A., kand. voyennykh nauk, inzh.-podpolkovnik; USENKO, V.G.,  
podpolkovnik

Calculation of the expected number of attacks of fighters of  
antisubmarine planes. Mor. sbor. 47 no.12:53-56 D '63.  
(MJRA 18:12)